

CHAPTER 3

PRENATAL DEVELOPMENT

MULTIPLE CHOICE

- 1) Today, in Western industrialized nations, the issue of whether to have children is a _____.
- A) biological given
 - B) compelling social expectation
 - C) matter of true individual choice
 - D) matter unaffected by cultural factors

Answer: C

Topic: Motivations for Parenthood

Content Ref: p. 87; screen 3.1

Objective: 3.1 Discuss factors that contribute to contemporary adults' decision making about parenthood, including timing of childbearing and family size.

Skill: Remember

Difficulty Level: Easy

- 2) The ready availability of effective contraception _____.
- A) has been common throughout the history of most Western industrialized nations
 - B) has enabled sexually active adults to avoid having children in most instances
 - C) is the only significant factor affecting decisions about whether to have children
 - D) makes the issue of whether to have children a strictly biological one

Answer: B

Topic: Motivations for Parenthood

Content Ref: p. 87; screen 3.1.1

Objective: 3.1 Discuss factors that contribute to contemporary adults' decision making about parenthood, including timing of childbearing and family size.

Skill: Remember

Difficulty Level: Moderate

- 3) Changes in cultural values within the last two generations have _____.
- A) allowed people to remain childless with less fear of social criticism
 - B) dramatically reduced the percentage of adults who do not want children
 - C) created a compelling social expectation to have children
 - D) redefined having children as an obligation to society

Answer: A

Topic: Motivations for Parenthood

Content Ref: p. 87; screen 3.1.1

Objective: 3.1 Discuss factors that contribute to contemporary adults' decision making about parenthood, including timing of childbearing and family size.

Skill: Remember

Difficulty Level: Easy

4) In a survey of a large, representative sample of U.S. adults of childbearing age, 90 percent of respondents reported that they _____.

- A) do not want to have any children
- B) have negative views about the idea of parenthood
- C) have two or more children
- D) already have children or are planning to have them

Answer: D

Topic: Motivations for Parenthood

Content Ref: p. 87; screen 3.1.1

Objective: 3.1 Discuss factors that contribute to contemporary adults' decision making about parenthood, including timing of childbearing and family size.

Skill: Remember

Difficulty Level: Easy

5) In Western nations, motivations for having children have changed over time, emphasizing _____ and deemphasizing _____.

- A) financial benefits; sharing a challenging but important life task
- B) individual fulfillment; obligation to society
- C) avoidance of social criticism; deepening the couple's relationship
- D) social expectations; passing on one's heritage and values

Answer: B

Topic: Motivations for Parenthood

Content Ref: p. 87; screen 3.1.1

Objective: 3.1 Discuss factors that contribute to contemporary adults' decision making about parenthood, including timing of childbearing and family size.

Skill: Understand

Difficulty Level: Moderate

6) When asked about the advantages of parenthood, Americans and Europeans most often cite _____.

- A) giving and receiving warmth and affection, and providing care and teaching
- B) having a source of caregiving and financial support in later life
- C) carrying on one's family name, lineage, heritage, or values
- D) strengthening the couple relationship through a shared project

Answer: A

Topic: Motivations for Parenthood

Content Ref: p. 88; screen 3.1.1

Objective: 3.1 Discuss factors that contribute to contemporary adults' decision making about parenthood, including timing of childbearing and family size.

Skill: Understand

Difficulty Level: Moderate

- 7) When asked about the disadvantages of parenthood, Americans and Europeans most often cite _____.
- A) financial strain and sacrifices
 - B) reduced time to spend with partner
 - C) risk of birth complications
 - D) loss of privacy

Answer: C

Topic: Motivations for Parenthood

Content Ref: p. 88; screen 3.1.1

Objective: 3.1 Discuss factors that contribute to contemporary adults' decision making about parenthood, including timing of childbearing and family size.

Skill: Understand

Difficulty Level: Moderate

- 8) Which statement about unintended pregnancies in the United States. is true?
- A) They are more common than intended pregnancies.
 - B) They are more common among low-income, less-educated mothers.
 - C) They are not associated with premature birth.
 - D) They are not associated with child health problems.

Answer: B

Topic: Motivations for Parenthood

Content Ref: p. 88; screen 3.1.1

Objective: 3.1 Discuss factors that contribute to contemporary adults' decision making about parenthood, including timing of childbearing and family size.

Skill: Understand

Difficulty Level: Moderate

- 9) The overall fertility rate refers to the _____ in a population.
- A) number of lifetime births per woman
 - B) number of lifetime births per married couple
 - C) ratio of the number of pregnant women to the total number of women
 - D) ratio of the number of pregnant women to the total number of people

Answer: A

Topic: Motivations for Parenthood

Content Ref: p. 89; screen 3.1.2

Objective: 3.1 Discuss factors that contribute to contemporary adults' decision making about parenthood, including timing of childbearing and family size.

Skill: Remember

Difficulty Level: Moderate

- 10) Since the economic recession of 2007–2009, the U.S. fertility rate has _____.
- A) increased to 2.1, which is higher than that of many other developed countries
 - B) remained at 2.1, which is lower than that of most other developed countries
 - C) declined to 1.8, which is higher than that of many other developed countries
 - D) declined to 1.8, which is lower than that of all other developed countries

Answer: C

Topic: Motivations for Parenthood

Content Ref: p. 89; screen 3.1.2

Objective: 3.1 Discuss factors that contribute to contemporary adults' decision making about parenthood, including timing of childbearing and family size.

Skill: Understand

Difficulty Level: Difficult

- 11) Between 2007 and 2017, birthrates in the United States _____.
- A) increased for women in their twenties and thirties and decreased for women 35 and older
 - B) increased for women in their twenties and decreased for women in their thirties
 - C) decreased for women in their twenties and thirties and increased for women 35 and older
 - D) decreased for women in all age categories

Answer: C

Topic: Motivations for Parenthood

Content Ref: p. 89; screen 3.1.2

Objective: 3.1 Discuss factors that contribute to contemporary adults' decision making about parenthood, including timing of childbearing and family size.

Skill: Understand

Difficulty Level: Difficult

- 12) The view that earlier birth order and wider spacing might result in more favorable cognitive outcomes has been _____.

- A) undermined by research indicating that the relationship of birth order and spacing to children's intelligence is negligible
- B) undermined by research indicating a negative correlation between wider spacing and children's intelligence
- C) supported by research indicating that parents' differential treatment of siblings is most responsive to children's personalities
- D) supported by research indicating that parents' differential treatment of siblings is most responsive to children's behavior

Answer: A

Topic: Motivations for Parenthood

Content Ref: p. 89; screen 3.1.2

Objective: 3.1 Discuss factors that contribute to contemporary adults' decision making about parenthood, including timing of childbearing and family size.

Skill: Understand

Difficulty Level: Difficult

- 13) The association between large family size and lower intelligence scores can be entirely explained by _____.

- A) the ability of parents of fewer children to provide more stimulation
- B) the effects of wider spacing of births
- C) the effects of birth order
- D) a strong trend for low-SES mothers to give birth to more children

Answer: D

Topic: Motivations for Parenthood

Content Ref: p. 89; screen 3.1.2

Objective: 3.1 Discuss factors that contribute to contemporary adults' decision making about parenthood, including timing of childbearing and family size.

Skill: Understand

Difficulty Level: Moderate

- 14) The risk of a chromosomal disorder _____ sharply for women older than 35, and reproductive capacity _____ with age.
- A) increases; increases
 - B) increases; decreases
 - C) decreases; increases
 - D) decreases; decreases

Answer: B

Topic: Motivations for Parenthood

Content Ref: pp. 89-90; screen 3.1.3

Objective: 3.1 Discuss factors that contribute to contemporary adults' decision making about parenthood, including timing of childbearing and family size.

Skill: Remember

Difficulty Level: Easy

- 15) Advanced paternal age is associated with _____ risk of certain genetically influenced disorders, and men's reproductive capacity _____ with age
- A) elevated; increases
 - B) elevated; decreases
 - C) decreased; decreases
 - D) decreased; increases

Answer: B

Topic: Motivations for Parenthood

Content Ref: pp. 89-90; screen 3.1.3

Objective: 3.1 Discuss factors that contribute to contemporary adults' decision making about parenthood, including timing of childbearing and family size.

Skill: Understand

Difficulty Level: Moderate

- 16) About once every 28 days, an ovum bursts from one of a woman's two _____ and is drawn into one of two _____.
- A) ovaries; testes
 - B) fallopian tubes; ovaries
 - C) testes; fallopian tubes
 - D) ovaries; fallopian tubes

Answer: D

Topic: Prenatal Development

Content Ref: p. 90; screen 3.2.1

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Easy

- 17) Which statement is true about the corpus luteum?
- A) It is where fertilization usually takes place.
 - B) It secretes hormones that prepare the lining of the uterus to receive a fertilized ovum.
 - C) It is one of two long, thin structures that lead to the hollow, softly lined uterus.
 - D) It is one of two walnut-sized organs located deep inside a woman's abdomen.

Answer: B

Topic: Prenatal Development

Content Ref: p. 90; screen 3.2.1

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Moderate

- 18) If pregnancy does not occur, the corpus luteum shrinks, and the _____.
- A) blastocyst forms a membrane called the amnion
 - B) one-celled zygote multiplies and forms a blastocyst
 - C) germinal period begins
 - D) lining of the uterus is discarded

Answer: D

Topic: Prenatal Development

Content Ref: p. 90; screen 3.2.1

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Easy

- 19) The male produces sperm in the _____, two glands located in the _____.
- A) penis; scrotum
 - B) scrotum; corpus luteum
 - C) testes; penis
 - D) testes; scrotum

Answer: D

Topic: Prenatal Development

Content Ref: p. 90; screen 3.2.1

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Moderate

- 20) Which statement about fertilization is true?
- A) It usually takes place in the ovaries.
 - B) It usually takes place in the uterus
 - C) Sperm are capable of fertilizing an ovum even if intercourse precedes ovulation.
 - D) Once released, an ovum stays in the fallopian tubes until it is fertilized.

Answer: C

Topic: Prenatal Development

Content Ref: p. 90; screen 3.2.1

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Understand

Difficulty Level: Moderate

- 21) The ovum can survive for approximately _____ after it is released from the ovary.
- A) three hours
 - B) one day
 - C) four days
 - D) six days

Answer: B

Topic: Prenatal Development

Content Ref: pp. 90-91; screen 3.2.1

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Easy

- 22) Most conceptions result from intercourse _____.
- A) during the first week of the menstrual cycle
 - B) during the last week of the menstrual cycle
 - C) on the day of ovulation or during the two days following it
 - D) on the day of ovulation or during the two days preceding it

Answer: D

Topic: Prenatal Development

Content Ref: p. 91; screen 3.2.1

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Moderate

- 23) The germinal period lasts _____.
- A) from conception to fertilization
 - B) from fertilization to implantation
 - C) for about 6 weeks
 - D) for about 13 weeks, or a trimester

Answer: B

Topic: Prenatal Development

Content Ref: p. 91; screen 3.2.2

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Understand

Difficulty Level: Moderate

- 24) Following conception, the one-celled _____ multiplies and forms a(n) _____.
- A) blastocyst; zygote
 - B) blastocyst; embryo
 - C) zygote; blastocyst
 - D) embryo; fetus

Answer: C

Topic: Prenatal Development

Content Ref: p. 91; screen 3.2.2

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Easy

- 25) The cells on the inside of the blastocyst are called the _____ and will become the _____.
- A) embryonic disk; structures that provide nourishment
 - B) embryonic disk; new organism
 - C) trophoblast; chorion
 - D) trophoblast; amnion

Answer: B

Topic: Prenatal Development

Content Ref: p. 91; screen 3.2.2

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Understand

Difficulty Level: Moderate

- 26) The cells on the outside of the blastocyst are called the _____ and will become the _____.
- A) embryonic disk; structures that provide protective covering and nourishment
 - B) embryonic disk; new organism
 - C) trophoblast; new organism
 - D) trophoblast; structures that provide protective covering and nourishment

Answer: D

Topic: Prenatal Development

Content Ref: p. 91; screen 3.2.2

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Understand

Difficulty Level: Moderate

- 27) Implantation occurs _____.
- A) when the fertilized ovum burrows into the ovaries
 - B) when the blastocyst burrows into the uterine lining
 - C) during the period of the embryo
 - D) before the ovum is fertilized

Answer: B

Topic: Prenatal Development

Content Ref: p. 91; screen 3.2.2

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Moderate

- 28) One of the functions served by amniotic fluid is to _____.
- A) deliver oxygen to the developing organism
 - B) help keep the temperature of the prenatal world constant
 - C) deliver nutrients to the organism and remove waste products
 - D) produce blood cells until the organs are mature enough to take over this function

Answer: B

Topic: Prenatal Development

Content Ref: p. 91; screen 3.2.2

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Understand

Difficulty Level: Moderate

- 29) Which statement about the yolk sac is true?
- A) It forms during the third trimester of pregnancy.
 - B) It is the outer ring of cells that surrounds the blastocyst.
 - C) It produces blood cells until the organs are mature enough to take over this function.
 - D) It contains one large vein that delivers blood loaded with nutrients and two arteries that remove waste.

Answer: C

Topic: Prenatal Development

Content Ref: p. 92; screen 3.2.2

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Moderate

- 30) Which statement about the placenta is true?
- A) It forms during the second trimester of pregnancy.
 - B) It encloses the developing organism in amniotic fluid.
 - C) It contains one large vein that delivers nutrients to the embryo.
 - D) It permits food and oxygen to reach the developing organism.

Answer: D

Topic: Prenatal Development

Content Ref: p. 93; screen 3.2.2

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Moderate

- 31) The ectoderm becomes the _____.
- A) muscles and skeleton
 - B) nervous system and skin
 - C) circulatory system and other internal organs
 - D) digestive system and lungs

Answer: B

Topic: Prenatal Development

Content Ref: p. 93; screen 3.2.3

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Moderate

- 32) The _____, which forms during the period of the embryo, will become the _____.
- A) mesoderm; nervous system, lungs, internal organs, and skin
 - B) chorion; endocrine system, muscles, placenta, and skeleton
 - C) yolk sac; circulatory system, skin, skeleton, and internal organs
 - D) endoderm; digestive system, lungs, urinary tract, and glands

Answer: D

Topic: Prenatal Development

Content Ref: p. 93; screen 3.2.3

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Moderate

- 33) The _____ folds over to form the _____, or primitive spinal cord.
- A) mesoderm; amnion
 - B) ectoderm; neural tube
 - C) endoderm; neural tube
 - D) ectoderm; chorion

Answer: B

Topic: Prenatal Development

Content Ref: p. 94; screen 3.2.3

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Moderate

- 34) By the end of Greta's first month of pregnancy, her embryo _____.
- A) has begun production of nerve cells that store information
 - B) has a heart that has begun to pump blood
 - C) can suck its thumb
 - D) can bend its arms

Answer: B

Topic: Prenatal Development

Content Ref: p. 94; screen 3.2.3

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Moderate

- 35) During the period of the embryo, in the absence of testosterone, _____.
- A) the liver and spleen take over production of blood cells
 - B) the heart develops separate chambers
 - C) testes in the male start to develop
 - D) female reproductive organs form

Answer: D

Topic: Prenatal Development

Content Ref: p. 94; screen 3.2.3

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Moderate

- 36) During the second month of pregnancy, the embryo _____.
- A) shields its eyes in response to light
 - B) responds to touch
 - C) kicks and bends its arms
 - D) can be irritated by sounds

Answer: B

Topic: Prenatal Development

Content Ref: p. 94; screen 3.2.3

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Moderate

- 37) The _____ partially overlaps with _____.
- A) first trimester; the period of the fetus
 - B) second trimester; the germinal period
 - C) second trimester; the period of the fetus
 - D) third trimester; the period of the embryo

Answer: A

Topic: Prenatal Development

Content Ref: p. 94; screen 3.2.4

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Understand

Difficulty Level: Difficult

- 38) By the twelfth week of pregnancy, _____.
- A) the sex of the fetus can be detected with ultrasound
 - B) the mother can feel the movements of the fetus
 - C) the fetus is viable and can survive if born early
 - D) synchrony between fetal heart rate and motor activity peaks

Answer: A

Topic: Prenatal Development

Content Ref: p. 94; screen 3.2.4

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Moderate

- 39) When can the heartbeat of the fetus first be heard through a stethoscope?
- A) at the start of the germinal period
 - B) during the period of the embryo
 - C) at the end of the first trimester
 - D) after the start of the third trimester

Answer: C

Topic: Prenatal Development

Content Ref: p. 94; screen 3.2.4

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Understand

Difficulty Level: Difficult

- 40) During the second trimester, a white, cheeselike substance called _____ emerges on the skin of the fetus.
- A) lanugo
 - B) amniotic fluid
 - C) vernix
 - D) chorion

Answer: C

Topic: Prenatal Development

Content Ref: p. 95; screen 3.2.4

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Moderate

- 41) What function does lanugo serve for the developing organism?
- A) It permits food and oxygen to reach the organism.
 - B) it provides the fetus a cushion against jolts caused by the mother's movements.
 - C) It helps regulate the fetus's body temperature.
 - D) It helps the vernix stick to the skin.

Answer: D

Topic: Prenatal Development

Content Ref: p. 95; screen 3.2.4

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Moderate

- 42) A 20-week-old fetus can _____.
- A) be stimulated as well as irritated by sounds
 - B) survive, if born early
 - C) control breathing movements
 - D) control its own body temperature

Answer: A

Topic: Prenatal Development

Content Ref: p. 95; screen 3.2.4

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Moderate

- 43) The age of viability occurs sometime between _____ and _____ weeks.
- A) 18; 22
 - B) 20; 24
 - C) 22; 26
 - D) 26; 30

Answer: C

Topic: Prenatal Development

Content Ref: p. 95; screen 3.2.4

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Difficult

- 44) Laurel is 36 weeks pregnant. A rise in her baby's heart rate is usually followed within five seconds by a _____.
- A) burst of motor activity
 - B) period of sleep
 - C) rise in Laurel's heart rate
 - D) drop in Laurel's body temperature

Answer: A

Topic: Prenatal Development

Content Ref: p. 95; screen 3.2.4

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Apply

Difficulty Level: Moderate

- 45) In one study, more active fetuses during the third trimester became 2-year-olds who _____.
- A) were easily overwhelmed by sensory stimulation
 - B) had trouble establishing a regular sleep-wake pattern
 - C) had irregular eating schedules
 - D) were less fearful

Answer: D

Topic: Prenatal Development

Content Ref: p. 96; screen 3.2.4

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Difficult

- 46) During the third trimester, _____.
- A) the fetus spends the majority of the day awake
 - B) painkillers should be used in any surgical procedures performed on a fetus
 - C) fetuses can hear bodily noises but not noises that occur outside of the womb
 - D) higher fetal activity is linked with abnormal neurological development

Answer: B

Topic: Prenatal Development

Content Ref: p. 96; screen 3.2.4

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Easy

- 47) A study involving the fetal heart rate's response to auditory stimuli during the third trimester suggests that fetuses _____.

- A) have lower heart rates after exposure to a new auditory stimulus
- B) can remember for at least a brief period
- C) cannot distinguish between their mother's voice and a stranger's voice
- D) cannot distinguish between familiar and unfamiliar melodies

Answer: B

Topic: Prenatal Development

Content Ref: p. 96; screen 3.2.4

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Understand

Difficulty Level: Moderate

- 48) Specific forms of fetal stimulation, such as reading aloud, are _____.

- A) required for normal fetal development
- B) more beneficial during sensitive periods than during other periods
- C) more important during the second trimester than during the third trimester
- D) unlikely to have a long-lasting impact

Answer: D

Topic: Prenatal Development

Content Ref: p. 96; screen 3.2.4

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Understand

Difficulty Level: Moderate

- 49) In the last weeks of pregnancy, _____.

- A) the weight of the fetus usually declines slightly
- B) fetal growth increases dramatically
- C) most fetuses assume an upside-down position
- D) the fetus begins relying on its own well-developed immune system

Answer: C

Topic: Prenatal Development

Content Ref: p. 96; screen 3.2.4

Objective: 3.2 List the three periods of prenatal development, and describe the major milestones of each.

Skill: Remember

Difficulty Level: Moderate

- 50) The term *teratogen* refers to _____.
- A) any environmental agent that causes damage during the prenatal period
 - B) a limited time span during which a part of the body is biologically prepared to develop rapidly
 - C) a rapid period of prenatal neurological development
 - D) a synthetic hormone used to prevent miscarriage

Answer: A

Topic: Prenatal Environmental Influences

Content Ref: p. 97; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Easy

- 51) The harm done by teratogens _____.
- A) depends on many factors, including heredity
 - B) tends to be greater during the germinal period than the period of the embryo
 - C) is greatest during the fetal period
 - D) affects the mother to a greater extent than the developing organism

Answer: A

Topic: Prenatal Environmental Influences

Content Ref: p. 97; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Understand

Difficulty Level: Difficult

- 52) Which statement about prenatal sensitive periods with respect to teratogens is true?
- A) The fetal period is the time when serious defects are most likely to occur.
 - B) In the germinal period, before implantation, teratogens rarely have any impact.
 - C) During the embryonic period, teratogenic damage is usually minor.
 - D) During the fetal period, teratogens have no impact on the developing organism.

Answer: B

Topic: Prenatal Environmental Influences

Content Ref: p. 97; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Understand

Difficulty Level: Moderate

- 53) The _____ is the time when serious defects from teratogens are most likely to occur.
- A) germinal period
 - B) period of the embryo
 - C) period of the fetus
 - D) third trimester

Answer: B

Topic: Prenatal Environmental Influences

Content Ref: p. 97; screen 00

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Moderate

- 54) Which organ or structure has the longest period of sensitivity to teratogens?
- A) central nervous system
 - B) external genitals
 - C) eyes
 - D) heart

Answer: A

Topic: Prenatal Environmental Influences

Content Ref: p. 98; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Understand

Difficulty Level: Difficult

- 55) Which statement about thalidomide is true?
- A) In the 1960s, it was used as a sedative, but it produced severe damaging effects.
 - B) It was widely prescribed between 1945 and 1970 to prevent miscarriages.
 - C) It is the most widely used, potent teratogenic medication and is currently prescribed to treat severe acne.
 - D) It affects the health of the mother but not the developing organism.

Answer: A

Topic: Prenatal Environmental Influences

Content Ref: p. 98; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Difficult

- 56) Which statement about diethylstilbestrol (DES) is true?
- A) In the 1960s, it was used as a sedative, but it produced severe damaging effects.
 - B) It was widely prescribed between 1945 and 1970 to prevent miscarriages.
 - C) It is the most widely used, potent teratogenic medication and is currently prescribed to treat severe acne.
 - D) It produces gross deformities of the developing embryo's arms and legs.

Answer: B

Topic: Prenatal Environmental Influences

Content Ref: p. 98; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Moderate

57) Daughters of mothers who took _____ showed unusually high rates of cancer of the vagina, malformations of the uterus, and infertility as they reached adolescence and young adulthood.

- A) thalidomide
- B) isotretinoin
- C) diethylstilbestrol (DES)
- D) aspirin

Answer: C

Topic: Prenatal Environmental Influences

Content Ref: p. 98; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Moderate

58) Which statement about isotretinoin is true?

- A) In the 1960s, it was used as a sedative, but it produced severe damaging effects.
- B) It was widely prescribed between 1945 and 1970 to prevent miscarriages.
- C) It is the most widely used, potent teratogenic medication and is currently prescribed to treat severe acne.
- D) It affects the health of the mother but not the developing organism.

Answer: C

Topic: Prenatal Environmental Influences

Content Ref: p. 99; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Moderate

59) Which statement about the effects of isotretinoin is true?

- A) Exposure to isotretinoin during the third trimester results in severe abnormalities, but exposure during the first trimester is not linked to adverse effects.
- B) Exposure to isotretinoin during the first trimester results in only minor abnormalities, but exposure during the third trimester is linked to severe abnormalities.
- C) Exposure to isotretinoin during the first trimester results in eye, ear, brain, heart, and immune system abnormalities.
- D) While exposure to isotretinoin can result in severe birth defects, risk to the developing organism is reduced if the mother receives large doses of vitamin A.

Answer: C

Topic: Prenatal Environmental Influences

Content Ref: p. 99; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Moderate

- 60) Which statement about the use of aspirin by pregnant women is true?
- A) Some research suggests that it is linked to brain damage, but other evidence fails to confirm this finding.
 - B) Persistent use is associated with an elevated incidence of premature delivery and low birth weight.
 - C) High doses increase the risk of low birth weight and delayed motor development in infancy.
 - D) Even low doses produce inattention, overactivity, and respiratory distress at birth.

Answer: A

Topic: Prenatal Environmental Influences

Content Ref: p. 99; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Moderate

- 61) During her pregnancy, Anneka increased her intake of coffee and tea. Her doctor is likely to tell her that high doses of caffeine contained in coffee and tea increase the risk of _____.
- A) premature labor
 - B) limb deformities
 - C) respiratory distress at birth
 - D) low birth weight

Answer: D

Topic: Prenatal Environmental Influences

Content Ref: p. 99; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Apply

Difficulty Level: Moderate

- 62) Which statement about the use of antidepressant medication by pregnant women is true?
- A) Some research suggests that it is linked to brain damage leading to impaired motor control and inattention.
 - B) Persistent use is associated with an elevated incidence of premature delivery, but contrary evidence exists.
 - C) High doses increase the risk of low birth weight and respiratory distress at birth.
 - D) Any benefits that antidepressants provide to the mother cannot outweigh the risks to the child.

Answer: B

Topic: Prenatal Environmental Influences

Content Ref: p. 99; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Moderate

63) Determining that a drug taken by the mother caused a problem for the developing organism is often difficult because _____.

- A) many of the problems caused by drugs taken during pregnancy are minor
- B) drug treatments have benefits that can in some circumstances outweigh their risks
- C) teratogens are most likely to cause disorders during the germinal period
- D) mothers often take more than one drug

Answer: D

Topic: Prenatal Environmental Influences

Content Ref: p. 99; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Understand

Difficulty Level: Difficult

64) Many women do not know that they are pregnant during the _____, when exposure to teratogens can be of greatest threat.

- A) time between conception and implantation
- B) germinal period
- C) early weeks of the embryonic period
- D) early weeks of the fetal period

Answer: C

Topic: Prenatal Environmental Influences

Content Ref: p. 99; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Understand

Difficulty Level: Moderate

65) Matthew's mother Selma used cocaine when she was pregnant, and Matthew was born drug-addicted. It is likely that _____.

- A) he will be very attentive to the environment
- B) his cries will be abnormally shrill
- C) he will overcome the harmful effects of drug exposure by age 3
- D) his motor development will be especially rapid during the first year

Answer: B

Topic: Prenatal Environmental Influences

Content Ref: p. 99; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Apply

Difficulty Level: Moderate

- 66) It is difficult to isolate the precise damage caused by illegal drug use during pregnancy because _____.
- A) most drug-using mothers refuse to participate in teratology research
 - B) the majority of babies born to drug-using mothers do not survive for more than a few days
 - C) most drug-using mothers stop using illegal drugs during the first trimester of pregnancy
 - D) users often take several drugs and display other high-risk behaviors

Answer: D

Topic: Prenatal Environmental Influences

Content Ref: p. 100; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Understand

Difficulty Level: Moderate

- 67) Which statement about prenatal marijuana exposure is true?
- A) Some studies show a link between exposure and later aggression in childhood and adolescence.
 - B) Its lasting consequences are well-established and understood.
 - C) Studies show no negative effects of exposure.
 - D) It is linked to an array of physical malformations.

Answer: A

Topic: Prenatal Environmental Influences

Content Ref: p. 100; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Understand

Difficulty Level: Moderate

- 68) Which statement about the effects of prenatal use of illegal drugs is true?
- A) They are independent of the effects of nutritional deprivation.
 - B) They are most likely to cause harm when use occurs during the germinal period.
 - C) They are less consistent than the impact of tobacco and alcohol.
 - D) They are more significant and better understood than the effect of legal substances such as tobacco and alcohol.

Answer: C

Topic: Prenatal Environmental Influences

Content Ref: p. 100; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Understand

Difficulty Level: Moderate

- 69) Which statement about prenatal exposure to cocaine is true?
- A) Cocaine expands blood vessels, causing the developing organism to receive too much oxygen.
 - B) Cocaine expands blood vessels, causing the developing organism to produce too much carbon dioxide.
 - C) Cocaine constricts blood vessels, causing oxygen delivered to the developing organism to fall for 15 minutes following a high dose.
 - D) Cocaine constricts blood vessels, causing oxygen delivered to the developing organism to increase for 15 minutes following a high dose.

Answer: C

Topic: Prenatal Environmental Influences

Content Ref: p. 100; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Moderate

- 70) The best-known prenatal effect of smoking is _____.
- A) maternal depression
 - B) respiratory distress at birth
 - C) low birth weight
 - D) delayed language development

Answer: C

Topic: Prenatal Environmental Influences

Content Ref: p. 100; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Easy

- 71) Amelia has smoked throughout her pregnancy. Now in her seventh month, Amelia is considering quitting. Quitting now would _____.
- A) have no effect, because smoking's effects are most pronounced in the germinal period
 - B) have no effect, because smoking can cause significant problems during the embryonic period
 - C) reduce the likelihood that her infant will be born underweight
 - D) be more beneficial than quitting during the second trimester would have been

Answer: C

Topic: Prenatal Environmental Influences

Content Ref: p. 100; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Apply

Difficulty Level: Difficult

- 72) Smoking harms the fetus _____.
- A) through the expansion of the mother's blood vessels, which affects blood flow to the uterus
 - B) by removing carbon monoxide from red blood cells, which damages the central nervous system
 - C) by preventing gene methylation and reducing levels of cadmium
 - D) through a combination of effects, including epigenetic modification

Answer: D

Topic: Prenatal Environmental Influences

Content Ref: p. 101; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Understand

Difficulty Level: Difficult

- 73) Maryann is pregnant and works in an environment in which many people smoke. What statement accurately describes the risk posed by this environment?

- A) The negative effects of smoking are evident only in children born to heavy smokers.
- B) Passive smoking is related to low birth weight, infant death, and childhood respiratory illnesses.
- C) Smoke-filled environments are harmful to expectant mothers, but not to their unborn children.
- D) The effects of passive smoking are not yet known.

Answer: B

Topic: Prenatal Environmental Influences

Content Ref: p. 101; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Apply

Difficulty Level: Moderate

- 74) Terrance, whose birth mother drank alcohol heavily throughout pregnancy, has a thin upper lip, short eyelid openings, a small head, and a smooth philtrum. His physical growth has been slow, and he shows impairments in memory, attention span, motor coordination, and social skills. Terrance has _____.

- A) fetal alcohol syndrome
- B) partial fetal alcohol syndrome
- C) alcohol-related neurodevelopmental disorder
- D) cytomegalovirus

Answer: A

Topic: Prenatal Environmental Influences

Content Ref: p. 101; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Apply

Difficulty Level: Moderate

- 75) What is required for a diagnosis of partial fetal alcohol syndrome?
- A) at least two of the three characteristic facial abnormalities
 - B) an alcohol-related physical malformation of the eyes, ears, or heart
 - C) deficient brain growth
 - D) absence of brain abnormalities

Answer: A

Topic: Prenatal Environmental Influences

Content Ref: p. 101; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Understand

Difficulty Level: Difficult

76) Hannah was prenatally exposed to alcohol. Her physical growth is typical and she has no facial abnormalities. However, she has impaired motor coordination, attention span, and memory. Hannah was probably born with _____.

- A) fetal alcohol syndrome (FAS).
- B) alcohol-related neurodevelopmental disorder (ARND).
- C) partial fetal alcohol syndrome (p-FAS).
- D) a genetic disorder.

Answer: B

Topic: Prenatal Environmental Influences

Content Ref: p. 101; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Apply

Difficulty Level: Moderate

77) What would support a diagnosis of alcohol-related birth defects (ARBD) but not alcohol-related neurodevelopmental disorder?

- A) deficient physical growth
- B) typical physical growth
- C) deficient brain growth
- D) absence of brain abnormalities

Answer: D

Topic: Prenatal Environmental Influences

Content Ref: p. 101; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Understand

Difficulty Level: Difficult

- 78) Alcohol causes harm to the developing organism by _____.
- A) increasing production of neurons in the primitive neural tube
 - B) drawing oxygen away from the mother
 - C) altering methylation of many genes
 - D) expanding the mother's blood vessels, which affects blood flow to the uterus

Answer: C

Topic: *Prenatal Environmental Influences*

Content Ref: p. 102; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: *Understand*

Difficulty Level: *Moderate*

- 79) Research suggests that paternal alcohol use around the time of conception _____.
- A) can alter gene expression
 - B) can cause fetal alcohol syndrome
 - C) is linked to blood vessel abnormalities
 - D) has no negative effect on the developing organism

Answer: A

Topic: *Prenatal Environmental Influences*

Content Ref: p. 102; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: *Remember*

Difficulty Level: *Easy*

- 80) For _____, the risk of a baby born with fetal alcohol syndrome is 20 to 25 times higher than for the rest of the U.S. population.
- A) African Americans
 - B) Asian Americans
 - C) European Americans
 - D) Native Americans

Answer: D

Topic: *Prenatal Environmental Influences*

Content Ref: p. 102; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: *Remember*

Difficulty Level: *Moderate*

- 81) _____ is (are) safe to drink during pregnancy.
- A) No amount of alcohol
 - B) One alcoholic beverage per day
 - C) Three to five alcoholic beverages per week
 - D) A few alcoholic beverages per month

Answer: A

Topic: *Prenatal Environmental Influences*

Content Ref: p. 102; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: *Remember*

Difficulty Level: *Easy*

- 82) The Alert Program was designed to _____.
- A) build public awareness of the dangers of fetal alcohol spectrum disorder
 - B) support legislation addressing the problem of fetal alcohol spectrum disorder
 - C) help children with fetal alcohol spectrum disorder develop self-regulation skills
 - D) teach therapeutic techniques to parents of children with fetal alcohol spectrum disorder

Answer: C

Topic: Prenatal Environmental Influences

Content Ref: p. 103 Box: Biology and Environment: Self-Regulation Therapy for Children with Fetal Alcohol Spectrum Disorder; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Easy

- 83) Findings from an investigation of the effects of the Alert Program suggest that _____.
- A) parental involvement in therapy sessions is required for behavioral improvement to occur
 - B) it is possible to modify some of the brain damage caused by fetal alcohol exposure
 - C) therapeutic interventions are most effective before the age of six
 - D) gains from treatment are greater on complex tasks rather than simple tasks

Answer: B

Topic: Prenatal Environmental Influences

Content Ref: p. 103 Box: Biology and Environment: Self-Regulation Therapy for Children with Fetal Alcohol Spectrum Disorder; screen 3.3.1

Skill: Remember

Difficulty Level: Moderate

- 84) Magnetic resonance imaging (MRI) gathered before and after the Alert Program intervention revealed _____.
- A) that changes in self-regulation ability were not associated with physical changes in the brain
 - B) that Alert led to denser gray matter in regions of the cerebral cortex crucial for self-regulation
 - C) a decrease in the density of gray matter but an increase in efficiency in different cerebral regions
 - D) an increase in the density of gray matter but a decrease in efficiency in different cerebral regions

Answer: B

Topic: Prenatal Environmental Influences

Content Ref: p. 103 Box: Biology and Environment: Self-Regulation Therapy for Children with Fetal Alcohol Spectrum Disorder; screen 3.3.1

Skill: Remember

Difficulty Level: Moderate

- 85) Which statement about radiation exposure during pregnancy is true?
- A) Low-level radiation from medical X-rays or industrial leakage is safe.
 - B) Even low-level radiation can increase the risk of childhood cancer.
 - C) The effects of radiation exposure are immediate and apparent.
 - D) Radiation exposure affects physical development but not cognitive or emotional development.

Answer: B

Topic: Prenatal Environmental Influences

Content Ref: pp. 103-4; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Understand

Difficulty Level: Moderate

- 86) Pregnant women are wise to avoid eating _____, which are heavily contaminated with _____.
- A) long-lived predatory fish; mercury
 - B) freshwater fish; lead
 - C) long-lived predatory fish; lead
 - D) freshwater fish; dioxins

Answer: A

Topic: Prenatal Environmental Influences

Content Ref: p. 104; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Easy

- 87) In Taiwan, prenatal exposure to high levels of _____ in rice oil resulted in births of children with low birth weight, discolored skin, and delayed cognitive development.
- A) dioxins
 - B) mercury
 - C) polychlorinated biphenyls (PCBs)
 - D) lead

Answer: C

Topic: Prenatal Environmental Influences

Content Ref: p. 104; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Moderate

- 88) Which teratogen is often present in paint flaking off the walls of old buildings?
- A) polychlorinated biphenyls (PCBs)
 - B) mercury
 - C) dioxins
 - D) lead

Answer: D

Topic: Prenatal Environmental Influences

Content Ref: p. 104; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Easy

- 89) Men with even tiny amounts of dioxin in their bloodstream father _____.
- A) nearly twice as many girls as boys
 - B) nearly three times as many boys as girls
 - C) more twins and triplets than unaffected men
 - D) fewer children than unaffected men

Answer: A

Topic: Prenatal Environmental Influences

Content Ref: pp. 104-5; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Moderate

- 90) Which statement about prenatal rubella is true?
- A) The greatest damage occurs when rubella strikes during the fetal period.
 - B) The organ damage inflicted by prenatal rubella often leads to severe mental illness, diabetes, and cardiovascular disease.
 - C) Routine vaccination has virtually eliminated rubella outbreaks in developing African and Asian countries.
 - D) Infection during the embryonic period is less harmful than during other prenatal periods.

Answer: B

Topic: Prenatal Environmental Influences

Content Ref: p. 105; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Moderate

- 91) Which statement about the human immunodeficiency virus (HIV) is true?
- A) There are currently no effective drug therapies to reduce the chance of prenatal virus transmission.
 - B) In developing countries, more than half of all new HIV infections affect women.
 - C) About 30 percent of new HIV infections occur in developing countries.
 - D) Untreated HIV-infected expectant mothers pass the virus to their fetus approximately 30 percent of the time.

Answer: B

Topic: Prenatal Environmental Influences

Content Ref: p. 106; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Moderate

- 92) Which of the following statements about HIV and AIDS is true?
- A) Untreated HIV-infected expectant mothers pass the virus to their fetus 10 to 20 percent of the time.
 - B) About 15 to 25 percent of untreated prenatal AIDS babies die by age 3.
 - C) There are no available drug therapies that reduce prenatal AIDS transmission.
 - D) AIDS progresses very slowly in infants, and rarely leads to death.

Answer: A

Topic: Prenatal Environmental Influences

Content Ref: p. 106; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Moderate

- 93) Which statement about the family of herpes viruses is true?
- A) A vaccine is widely available in industrialized nations, but access is limited in developing nations.
 - B) Herpes simplex 2 is the most frequent prenatal infection.
 - C) Cytomegalovirus is a disease that destroys the immune system.
 - D) Cytomegalovirus often has no symptoms, very mild symptoms, or unfamiliar symptoms.

Answer: D

Topic: Prenatal Environmental Influences

Content Ref: p. 106; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Moderate

- 94) Which statement about the Zika virus is true?
A) It is mainly transmitted by mosquito.
B) It usually has no visible symptoms.
C) It is not transmitted from person to person.
D) It is the most frequent prenatal infection.

Answer: A

Topic: Prenatal Environmental Influences

Content Ref: p. 106; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Easy

- 95) A 2015 outbreak in Brazil of the Zika virus drew widespread attention because of an associated rise in the number of babies born with _____.
A) microcephaly
B) the human immunodeficiency virus (HIV)
C) herpes simplex 2
D) toxoplasmosis

Answer: A

Topic: Prenatal Environmental Influences

Content Ref: p. 106; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Easy

- 96) One way to reduce the chance of contracting toxoplasmosis is to avoid _____.
A) eating long-lived predatory fish
B) exposure to X-rays
C) contact with the feces of infected cats
D) environments in which many people smoke

Answer: C

Topic: Prenatal Environmental Influences

Content Ref: p. 106; screen 3.3.1

Objective: 3.3a Cite factors that influence the impact of teratogens, and discuss evidence on the impact of known or suspected teratogens.

Skill: Remember

Difficulty Level: Moderate

- 97) In healthy, physically fit women, _____ exercise is related to _____.
A) regular, aerobic; low birth weight
B) frequent, vigorous; a reduction in risk of premature birth
C) regular, moderate; a reduction in risk of maternal diabetes
D) frequent, vigorous; high birth weight

Answer: C

Topic: Prenatal Environmental Influences

Content Ref: p. 107; screen 3.3.2

Objective: 3.3b Describe the impact of additional maternal factors on prenatal development.

Skill: Remember

Difficulty Level: Easy

98) Marizol is pregnant and wonders how much weight she should gain. Her doctor will probably recommend that she gain _____ to _____ pounds.

- A) 10; 15
- B) 20; 25
- C) 25; 30
- D) 30; 35

Answer: C

Topic: Prenatal Environmental Influences

Content Ref: p. 107; screen 3.3.2

Objective: 3.3b Describe the impact of additional maternal factors on prenatal development.

Skill: Remember

Difficulty Level: Moderate

99) _____ supplementation around the time of conception reduces the risk of abnormalities of the neural tube.

- A) Folic acid
- B) Vitamin A
- C) Iodine
- D) Calcium

Answer: A

Topic: Prenatal Environmental Influences

Content Ref: p. 107; screen 3.3.2

Objective: 3.3b Describe the impact of additional maternal factors on prenatal development.

Skill: Remember

Difficulty Level: Moderate

100) U.S. regulations mandate the fortification of many products with folic acid because _____.

- A) every pregnant woman should receive at least 4 milligrams of folic acid each day in order to avoid neural tube defects
- B) folic acid provides many benefits early in pregnancy, when many women may not be aware that they are pregnant
- C) vitamin supplements of folic acid are not widely available
- D) folic acid provides a variety of benefits with little risk of harm from excessive intake

Answer: B

Topic: Prenatal Environmental Influences

Content Ref: pp. 107-8; screen 3.3.2

Objective: 3.3b Describe the impact of additional maternal factors on prenatal development.

Skill: Understand

Difficulty Level: Moderate

101) Enriching pregnant women's diets with calcium _____.

- A) can cause miscarriages in the germinal period
- B) helps prevent neural tube defects
- C) virtually eradicates infantile hypothyroidism
- D) helps prevent low birth weight

Answer: D

Topic: Prenatal Environmental Influences

Content Ref: p. 108; screen 3.3.2

Objective: 3.3b Describe the impact of additional maternal factors on prenatal development.

Skill: Understand

Difficulty Level: Moderate

- 102) Which statement about emotional stress during pregnancy is true?
- A) During stressful events, the uterus receives more blood than usual, but the heart and brain receive less.
 - B) The body uses epinephrine to return functions to normal after a stressful event.
 - C) Occasional, mild to moderate stress has no adverse impact.
 - D) Occasional, mild to moderate stress has the same impact on the body that severe stress has.

Answer: C

Topic: Prenatal Environmental Influences

Content Ref: p. 108; screen 3.3.2

Objective: 3.3b Describe the impact of additional maternal factors on prenatal development.

Skill: Remember

Difficulty Level: Moderate

- 103) Infants and children of mothers who experienced severe prenatal anxiety display cortisol levels that are _____, which signals _____.
- A) always abnormally high; reduced physiological capacity to manage stress
 - B) always abnormally low; enhanced physiological capacity to manage stress
 - C) either abnormally high or abnormally low; reduced physiological capacity to manage stress
 - D) either abnormally high or abnormally low; exceptionally high physiological capacity to manage stress

Answer: C

Topic: Prenatal Environmental Influences

Content Ref: p. 108; screen 3.3.2

Objective: 3.3b Describe the impact of additional maternal factors on prenatal development.

Skill: Remember

Difficulty Level: Moderate

- 104) The relationship of social support to positive pregnancy outcomes and subsequent child development is _____ for _____ women.
- A) moderate; low-income
 - B) particularly strong; low-income
 - C) strongest; affluent
 - D) strongest; middle-income

Answer: B

Topic: Prenatal Environmental Influences

Content Ref: p. 109; screen 3.3.2

Objective: 3.3b Describe the impact of additional maternal factors on prenatal development.

Skill: Remember

Difficulty Level: Easy

- 105) Which statement about Rh factor incompatibility is true?
- A) Rh-positive blood is recessive and Rh-negative blood is dominant.
 - B) When the blood type of the mother and fetus differ, blood transfusions are usually required.
 - C) First-born children are rarely affected by Rh factor incompatibility.
 - D) Rh-positive babies are routinely given a vaccine at birth to prevent the buildup of harmful Rh antibodies.

Answer: C

Topic: Prenatal Environmental Influences

Content Ref: p. 109; screen 3.3.2

Objective: 3.3b Describe the impact of additional maternal factors on prenatal development.

Skill: Understand

Difficulty Level: Difficult

- 106) Cara is Rh-negative and Silas, her first child, is Rh-positive. Cara's doctor will probably _____.
- A) give Silas a vaccine to prevent heart damage and intellectual disabilities
 - B) advise Cara not to have another child, due to Rh incompatibility
 - C) give Cara a vaccine to prevent the buildup of antibodies to the foreign Rh protein
 - D) do nothing, because firstborn children are not affected by Rh levels

Answer: C

Topic: Prenatal Environmental Influences

Content Ref: p. 109; screen 3.3.2

Objective: 3.3b Describe the impact of additional maternal factors on prenatal development.

Skill: Apply

Difficulty Level: Moderate

- 107) In which scenario would Rh factor be associated with a risk of developmental problems?
- A) the father is Rh-negative, but the mother is Rh-positive
 - B) the mother is Rh-negative, but the baby is Rh-positive
 - C) both the father and the mother are Rh-positive
 - D) both the father and the mother are Rh-negative

Answer: B

Topic: Prenatal Environmental Influences

Content Ref: p. 109; screen 3.3.2

Objective: 3.3b Describe the impact of additional maternal factors on prenatal development.

Skill: Understand

Difficulty Level: Difficult

- 108) Rh factor incompatibility can result in intellectual disability, miscarriage, heart disease, and infant death when the _____.
- A) mother cannot form antibodies to the Rh protein
 - B) fetus cannot form antibodies to the Rh protein
 - C) father forms antibodies to the Rh protein and these antibodies enter the fetus's system
 - D) mother forms antibodies to the Rh protein and these antibodies enter the fetus's system

Answer: D

Topic: Prenatal Environmental Influences

Content Ref: p. 109; screen 3.3.2

Objective: 3.3b Describe the impact of additional maternal factors on prenatal development.

Skill: Understand

Difficulty Level: Difficult

- 109) Darya is a healthy 35-year-old woman who is pregnant with her first child. Darya is _____.
- A) less likely than a woman in her forties to have a baby with low birth weight
 - B) less likely to have a baby with low birth weight than she is to experience maternal preeclampsia
 - C) more likely than a woman in her twenties to have a baby with low birth weight
 - D) more likely than a woman in her twenties to experience maternal preeclampsia

Answer: A

Topic: Prenatal Environmental Influences

Content Ref: p. 109; screen 3.3.2

Objective: 3.3b Describe the impact of additional maternal factors on prenatal development.

Skill: Understand

Difficulty Level: Moderate

- 110) Infants born to teenagers have a higher rate of problems because _____.
- A) teenagers' reproductive organs are not yet mature enough to support a pregnancy.
 - B) teenagers are not yet physically ready to give birth.
 - C) most pregnant teenagers come from backgrounds in which stress, poor nutrition, and health problems are common
 - D) first births to women in their thirties and early forties have increased dramatically over the past several decades

Answer: C

Topic: Prenatal Environmental Influences

Content Ref: p. 110; screen 3.3.2

Objective: 3.3b Describe the impact of additional maternal factors on prenatal development.

Skill: Remember

Difficulty Level: Easy

- 111) Which statement about the Nurse–Family Partnership is true?
- A) It is an international program designed to reduce the risk of teratogens.
 - B) One of its goals is to promote competent early caregiving.
 - C) It is a series of childbirth classes offered at many U.S. hospitals.
 - D) It provides family planning and genetic counseling to couples.

Answer: B

Topic: Prenatal Environmental Influences

Content Ref: p. 110 Box: Social Issues: Health: The Nurse–Family Partnership: Reducing Maternal Stress and Enhancing Child Development Through Social Support; screen 3.3.2

Objective: 3.3b Describe the impact of additional maternal factors on prenatal development.

Skill: Remember

Difficulty Level: Easy

- 112) Which research conclusion about the effectiveness of the Nurse–Family Partnership is true?
- A) The benefits of the intervention were the greatest for children from high-SES families.
 - B) Trained paraprofessionals were more effective than professional nurses in preventing delayed mental development.
 - C) As kindergartners, children in the program scored higher in language skills, but lower in intelligence, than comparison children.
 - D) From their baby's birth on, home-visited mothers were on a more favorable life course.

Answer: D

Topic: Prenatal Environmental Influences

Content Ref: p. 110 Box: Social Issues: Health: The Nurse–Family Partnership: Reducing Maternal Stress and Enhancing Child Development Through Social Support; screen 3.3.2

Objective: 3.3b Describe the impact of additional maternal factors on prenatal development.

Skill: Remember

Difficulty Level: Easy

- 113) A diabetic mother's excess blood glucose causes the fetus to _____.
- A) lose weight
 - B) grow larger than average
 - C) secrete abnormally low levels of insulin
 - D) develop chromosomal abnormalities

Answer: B

Topic: The Importance of Prenatal Health Care

Content Ref: p. 111; screen 3.4

Objective 3.4: Explain why early and regular health care is vital during the prenatal period.

Skill: Remember

Difficulty Level: Moderate

- 114) Kaya's face, hands, and feet began to swell in the second half of her pregnancy. Kaya's doctor began to monitor her blood pressure. The doctor was probably concerned about _____.
- A) toxoplasmosis
 - B) maternal diabetes
 - C) Rh incompatibility
 - D) preeclampsia

Answer: D

Topic: The Importance of Prenatal Health Care

Content Ref: p. 111; screen 3.4

Objective 3.4: Explain why early and regular health care is vital during the prenatal period.

Skill: Apply

Difficulty Level: Moderate

- 115) When pregnant women experience preeclampsia, blood pressure _____, which can _____.
- A) increases sharply; cause brain hemorrhages in the mother, but does not affect the fetus
 - B) increases sharply; cause brain hemorrhages in the mother as well as fetal death
 - C) decreases sharply; cause brain hemorrhages in the mother, but does not affect the fetus
 - D) decreases sharply; cause brain hemorrhages in the mother as well as fetal death

Answer: B

Topic: The Importance of Prenatal Health Care

Content Ref: p. 111; screen 3.4

Objective 3.4: Explain why early and regular health care is vital during the prenatal period.

Skill: Apply

Difficulty Level: Moderate

- 116) Which statement about prenatal care for expectant mothers in the United States is true?
- A) More than 10 percent of expectant mothers receive late or no prenatal care.
 - B) Inadequate care is far more common among low-income, ethnic minority mothers.
 - C) Adolescent expectant mothers are less likely to receive inadequate prenatal care than other expectant mothers.
 - D) There are no government-sponsored health services for low-income pregnant women.

Answer: B

Topic: The Importance of Prenatal Health Care

Content Ref: p. 111; screen 3.4

Objective 3.4: Explain why early and regular health care is vital during the prenatal period.

Skill: Remember

Difficulty Level: Moderate

- 117) A study found that when minority women come in for prenatal appointments, they _____.
- A) prefer health care that focuses on completing required tests and conveying results
 - B) tend to report more negative experiences with health care providers
 - C) have difficulty acknowledging the need for medical procedures
 - D) prefer to communicate in English even if they are more proficient in another language

Answer: B

Topic: The Importance of Prenatal Health Care

Content Ref: p. 112 Box: Cultural Influences: Culturally Sensitive Prenatal Health Care: Perspectives of Expectant Mothers; screen 3.4

Objective 3.4: Explain why early and regular health care is vital during the prenatal period.

Skill: Remember

Difficulty Level: Moderate

- 118) Which action would be evidence of a commitment to culturally sensitive prenatal health care?
- A) ensuring that required tests are completed
 - B) having Spanish-speaking doctors and nurses
 - C) conveying test results
 - D) handling appointments in as time-efficient a manner as possible

Answer: B

Topic: The Importance of Prenatal Health Care

Content Ref: p. 112 Box: Cultural Influences: Culturally Sensitive Prenatal Health Care: Perspectives of Expectant Mothers; screen 3.4

Objective 3.4: Explain why early and regular health care is vital during the prenatal period.

Skill: Apply

Difficulty Level: Easy

- 119) In group prenatal care, _____.
- A) expectant mothers are grouped by age, and each group is seen by an assigned health-care provider
 - B) trained leaders provide expectant mothers with a group discussion session after each medical checkup
 - C) expectant mothers and fathers take turns facilitating group discussions
 - D) whole families, including mothers, fathers, and siblings, are included in prenatal visits

Answer: B

Topic: The Importance of Prenatal Health Care

Content Ref: p. 112 Box: Cultural Influences: Culturally Sensitive Prenatal Health Care: Perspectives of Expectant Mothers; screen 3.4

Objective 3.4: Explain why early and regular health care is vital during the prenatal period.

Skill: Remember

Difficulty Level: Moderate

- 120) _____ is an example of a situational barrier (rather than a personal barrier) that can prevent mothers from seeking prenatal care.

- A) Difficulty finding a doctor
- B) Psychological stress
- C) The demands of taking care of other young children
- D) Ambivalence about the pregnancy

Answer: A

Topic: The Importance of Prenatal Health Care

Content Ref: p. 112; screen 3.4

Objective 3.4: Explain why early and regular health care is vital during the prenatal period.

Skill: Remember

Difficulty Level: Moderate

121) _____ is an example of a personal barrier (rather than a situational barrier) that can prevent mothers from seeking prenatal care.

- A) Difficulty finding a doctor
- B) Psychological stress
- C) Trouble with scheduling appointments
- D) Needing to arrange transportation to doctor's appointments

Answer: B

Topic: *The Importance of Prenatal Health Care*

Content Ref: p. 112; screen 3.4

Objective 3.4: *Explain why early and regular health care is vital during the prenatal period.*

Skill: *Remember*

Difficulty Level: *Moderate*

122) For a healthy pregnancy, the mother should _____.

- A) become vaccinated against rubella as soon as she knows she is pregnant
- B) confirm that she is pregnant before scheduling a prenatal visit
- C) engage in moderate exercise
- D) gain as much weight as she feels is appropriate

Answer: C

Topic: *The Importance of Prenatal Health Care*

Content Ref: p. 113; screen 3.4

Objective 3.4: *Explain why early and regular health care is vital during the prenatal period.*

Skill: *Remember*

Difficulty Level: *Easy*

ESSAY

123) When Americans and Europeans are asked about their motivations for parenthood, what are the most frequent advantages and disadvantages they list?

Answer: Although some ethnic and regional differences exist, in all groups highly rated reasons for having children include personal fulfillment—for example, the warm, affectionate relationship and opportunities for care and teaching that children provide. Also frequently mentioned are the deepening of a couple's relationship that comes from sharing in a challenging but important life task, and the sense of future continuity that results from perpetuating a family line and passing on one's heritage and values. Less important but still mentioned are social and economic returns, including being recognized as a family and having children to rely on as sources of caregiving and financial support late in life. Among disadvantages of parenthood, adults most often cite concerns about role overload, doubts about their own readiness for parenthood, and worries about bringing children into a troubled world. The financial strains of child rearing follow close behind.

Content Ref: pp. 87-88; screen 3.1.1

124) What are teratogens? What factors determine their impact on a developing organism?

Answer: The term *teratogen* refers to any environmental agent that causes damage during the prenatal period. The harm done by teratogens is not always simple and straightforward, and depends on the following factors:

- *Dose.* Larger doses over longer time periods usually have more negative effects.
- *Heredity.* The genetic makeup of the mother and the developing organism plays an important role. Some individuals are better able than others to withstand harmful environments.

- *Other negative influences.* The presence of several negative influences at once, such as additional teratogens, poor nutrition, and lack of medical care, can worsen the impact of a single harmful agent.
- *Age.* The effects of teratogens vary with the age of the organism at the time of exposure. Some parts of the body, such as the brain and eye, have long sensitive periods (during which teratogens can have an impact) that extend throughout prenatal development. Sensitive periods for other organs and bodily systems are much shorter. During the germinal period, teratogens rarely have any impact. If they do, the tiny mass of cells is usually so damaged that it dies. The embryonic period is the time when serious defects are most likely to occur because the foundations for all body parts are being laid down. During the fetal period, teratogenic damage is usually minor. However, organs such as the brain, ears, eyes, teeth, and genitals can still be strongly affected.

Content Ref: p. 97; screen 3.3.1

125) Describe positive and negative effects of exercise during pregnancy.

Answer: In healthy, physically fit women, regular moderate exercise, such as walking, swimming, biking, or an aerobic workout, is related to improved fetal cardiovascular functioning, higher birth weight, and a reduction in the risk for certain complications, such as pregnancy-induced maternal diabetes and high blood pressure. However, frequent, vigorous maternal exercise, especially late in pregnancy, results in lower birth weight compared to healthy, nonexercising pregnant women. Hospital-sponsored childbirth education programs frequently offer exercise classes and suggest appropriate routines that help prepare for labor and delivery. During the last trimester, when the abdomen grows very large, mothers have difficulty moving freely and often must cut back on exercise. Most women, however, do not engage in sufficient moderate exercise during pregnancy to promote their own and their baby's health. An expectant mother who remains fit experiences fewer physical discomforts in the final weeks. Pregnant women with health problems, such as circulatory difficulties or a history of miscarriages, should consult their doctors about a physical fitness routine. For these mothers, exercise (especially the wrong kind) can endanger the pregnancy.

Content Ref: p. 107; screen 3.3.2

126) Sierra is Rh-negative and her husband, Marcus, is Rh-positive. What should Sierra know about the consequences of this blood type incompatibility?

Answer: Sierra should know that when inherited blood types of mother and fetus differ, serious problems sometimes result. The most common cause of these difficulties is Rh factor incompatibility. When the mother is Rh-negative (which means she lacks the Rh blood protein) and the father is Rh-positive (which means he has the protein), the baby may inherit the father's Rh-positive blood type. Because Rh-positive blood is dominant and Rh-negative blood is recessive, the chances are good that the baby will be Rh-positive. If even a little of a fetus's Rh-positive blood crosses the placenta into the Rh-negative mother's bloodstream, she begins to form antibodies to the foreign Rh protein. If these enter the fetus's system, they destroy red blood cells, reducing the oxygen supply to organs and tissues. Intellectual disability, miscarriage, heart damage, and infant death can occur. It takes time for the mother to produce Rh antibodies, so firstborn children are rarely affected, but the danger increases with each additional pregnancy. Fortunately, Rh incompatibility can be prevented in most cases. After the birth of each Rh-positive baby, Rh-negative mothers are routinely given a vaccine to prevent the buildup of antibodies. In emergency cases, blood transfusions can be performed immediately after delivery or, if necessary, even before birth.

Content Ref: p. 109; screen 3.3.2

127) Describe the effects of maternal emotional stress during pregnancy.

Answer: When women experience severe emotional stress during pregnancy, their babies are at risk for a wide variety of difficulties. Intense anxiety—especially during the first two trimesters—is associated

with higher rates of miscarriage, prematurity, low birth weight, physical defects, infant respiratory and digestive illnesses, colic (persistent infant crying), sleep disturbances, and irritability during the child's first three years. Prenatal stressors consistently found to impair later physical and psychological well-being include chronic strain due to poverty; partner abuse; major negative life events such as divorce or death of a family member; disasters such as earthquakes or terrorist attacks; and fears specific to pregnancy and childbirth, including persistent anxiety about the health and survival of the baby and oneself.

While mild to moderate occasional stress has no adverse impact, severe maternal stress affects prenatal development. When we experience fear and anxiety, stress hormones released into our bloodstream cause us to be "poised for action." Large amounts of blood are sent to parts of the body involved in the defensive response—the brain, the heart, and the muscles in the arms, legs, and trunk. Blood flow to other organs, including the uterus, may be reduced. As a result, the fetus is deprived of a full supply of oxygen and nutrients.

Content Ref: pp. 108-9; screen 3.3.2

128) Explain why some women do not seek prenatal care.

Answer: Inadequate care is far more common among adolescent and low-income, ethnic minority mothers. Although government-sponsored health services for low-income pregnant women have been expanded, some women do not qualify and must pay for at least part of their care. Besides financial hardship, some mothers have situational barriers, including difficulty finding a doctor, getting an appointment, and arranging transportation, as well as insensitive or unsatisfying experiences with clinic staff. Other mothers have personal barriers, including psychological stress, the demands of taking care of other young children, family crises, lack of knowledge about the signs of pregnancy and benefits of prenatal care, and ambivalence about the pregnancy. Many also engage in high-risk behaviors, such as smoking and drug use, which they do not want to reveal to health professionals.

Content Ref: pp. 111-113; screen 3.4

129) Why is early and regular health care during the prenatal period important?

Answer: While most pregnancies are free of complications, unexpected difficulties can arise, especially if mothers have health problems. For example, an estimated 9 percent of expectant women are diagnosed with *gestational diabetes*, impaired glucose tolerance that emerges during pregnancy. All diabetic women need careful prenatal monitoring. Extra glucose in the mother's bloodstream causes the fetus to grow larger than average, making pregnancy and birth problems more common. Furthermore, these infants are at increased risk of becoming overweight or obese and developing type 2 diabetes. Maternal high blood glucose also greatly elevates the chances of physical malformations and compromises prenatal brain development: It is linked to poorer attention, memory, and learning in infancy and early childhood.

Another complication, experienced by 5 to 10 percent of pregnant women, is *preeclampsia*, in which blood pressure increases sharply and the face, hands, and feet swell in the last half of pregnancy. Untreated preeclampsia can cause brain hemorrhages and kidney failure in expectant mothers, damage to the placenta, and fetal death. Usually, hospitalization, bed rest, and drugs can lower blood pressure to a safe level. If not, the baby must be delivered at once.

Unfortunately, 6 percent of pregnant women in the United States wait until after the first trimester to seek prenatal care or receive none at all. Inadequate health care is far more common among low-income, ethnic minority mothers. Their infants are three times more likely to be born underweight and five times more likely to die than babies of mothers who receive early medical attention.

Content Ref: pp. 111-112; screen 3.4